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## Does politicizing 'gender' influence the possibility of conducting academic research? Evidence from a randomized controlled trial

Tünde Lénárd <sup>a,\*</sup>, Dániel Horn <sup>a,b</sup>, Hubert János Kiss <sup>a,b</sup><sup>a</sup> Institute of Economics, Centre for Economic and Regional Studies, Budapest, Tóth Kálmán utca 4, H-1097, Hungary<sup>b</sup> Corvinus University of Budapest, Hungary

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## ABSTRACT

We detect a significant negative effect of mentioning 'gender' as a research topic on conducting academic research in Hungary. Using a randomized information treatment involving a comprehensive sample of Hungarian education providers we find that they are less willing to cooperate in a gender-related future research compared to a research without this specification. Our results also indicate that this negative sentiment is clearly against gender and not against any topic covering social inequalities in general.

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## 1. Introduction

In October 2018 the Hungarian government revoked accreditation for gender studies programmes in Hungary (Kent and Tapfumaneyi, 2018) after giving the universities affected by the ban only 24 hours to comment on the bill related to this measure in August. Before this, the government actively generated a sentiment against gender studies, framing gender topics as an ideology rather than a scientific field of study (Szél, 2018). Scientists doing gender, migration and LBMT-related research were listed with their names and pictures on one of the publicly pro-government weekly's online portal two months before this policy act (Figyelő.hu, 2018), and there were numerous other mentions of the 'gender' in negative contexts by high-ranked government officials before (and after) the accreditation of gender-studies programmes was revoked.

It is important to note that in Hungary, the meaning of 'gender' is much more narrow and more political than its everyday meaning in English, where 'gender' many times seems exchangeable with 'sex'. In Hungarian, the word *gender* is often considered a feature of the LGBTQ community and used in a political context.

Randomized information treatments or 'nudges' have been proven effective and relatively cheap tools for discovering behavioural patterns in social science. These 'nudges' have been

extensively used to help research on various subjects, from tax compliance through educational issues (The Behavioural Insights Team, 2019) to discovering gender discrimination patterns on the labour market (Booth and Leigh, 2010; Bygren et al., 2017). Utilizing a randomized information treatment,<sup>1</sup> we want to see whether this pressure on gender-related topics translates into a backlash against conducting academic research in Hungary.

## 2. Research design and data

Our aim is to assess the willingness to cooperate in future research among Hungarian education providers, given that gender is a topic of the research.

Conducting this research was made possible by an ongoing project of the Institute of Economics of the Centre for Economic and Regional Studies of the Hungarian Academy of Sciences. In this project we have been carrying out a field experiment in a sample of Hungarian secondary schools on how economic preferences (time, risk, social and competitive preferences) affect school performance. As a substantial gender difference in some of these preferences (most notably risk and competitive

\* Corresponding author.

E-mail address: [lenard.tunde@rtk.mta.hu](mailto:lenard.tunde@rtk.mta.hu) (T. Lénárd).

<sup>1</sup> The experiment is registered at the AEA registry for randomized controlled trials: Horn, Daniel, Hubert Kiss and Tünde Lénárd. 2019. "Does gender engender danger for scientific research?". AEA RCT Registry. January 04. <https://doi.org/10.1257/rct.3770-1.0>.

preferences) have been found in the literature (Niederle, 2016), gender is a natural part of our investigation. We used this feature when, at the beginning of the project in January 2019, we sent out letters to secondary education providers asking them about their willingness to facilitate research in their schools.

We created three groups and randomly assigned education providers to them. Three sorts of letters were sent out: one treatment and two control groups. The one-page long letters were different in only a half-sentence within the first paragraph (see the original Hungarian as well as the English translation of the letters in the online Appendix A). The baseline sentence was:

*"The purpose of the research, funded by the National Research, Development and Innovation Office (NKFIH), is to explore the relationship between the non-cognitive skills of Hungarian secondary-school students and their school performance."*

For the treatment group letter, we added *"with particular reference to differences between sexes (gender)"* at the end of this sentence, while in the letter for the second control group we added *"with particular reference to social differences."*

We use the control groups to test whether the backlash is due to gender only, and not in general to any research on social inequalities.

We explicitly used the word 'gender' in English in the treatment group, as a trigger, as this exact word is used in the popular communication in the Hungarian media, albeit the literal translation of gender (sex/sexes) is *nem/nemek* in Hungarian, which word is a bit less political. The aim was to use this information nudge to arouse negative sentiments, if there are any, towards the research of differences between sexes.

We were interested in whether the rate of willingness to cooperate in a future lab-in-the-field experiment varies among the three groups.

Our hypotheses are the following:

H1: The education providers in the treatment group are significantly less willing to cooperate than those in the baseline group.

H2: The education providers in the treatment group are significantly less willing to cooperate than the institutions in the social-status-focused group.

All data (including contact data) related to the education providers were retrieved from the Public Education Information System of Hungary.<sup>2</sup> We took only those institutions into account that run at least one secondary school (either academic, mixed or vocational school). There are 341 education providers in total that fulfil this criterion. The random assignment to the three groups was done by a computer-generated random number, resulting in the following group numbers:

- treatment group (gender-focused) – 113 education providers;
- social-status-focused control group – 107 education providers;
- baseline control group – 121 education providers.

Each provider received a single email. E-mail bounce rates were around 3%–6% in every group (there were 17 bounces out of the 341 in total), and there is no significant difference in these rates across groups, even if we merge the two control groups and compare it to the treated.

To check covariate balance, we ran a multinomial probit model of the randomized assignment on the region of operation in Hungary (7 categories) and the type of the education provider (government; local government; church; private; other) and found no significant differences between the groups (see online appendix Table B.1 for details).

<sup>2</sup> Oktatási Hivatal: Működő köznevelési intézmények feladatellátási helyei. Köznevelési közérdekű adatok publikálása. Retrieved Nov. 15, 2018, from: <https://dari.oktatas.hu/index.php?id=kozerdeku>.

### 3. Results

The raw consent rates are 6.19% in the gender-focused group, 13.08% in the social-status-focused group and 14.88% in the baseline group. While the rates in the two control groups are not significantly different, the consent rate of the gender-focused group is significantly lower than the other two.<sup>3,4</sup>

To capture the Average Treatment Effect (ATE) of being assigned to the treated group on the consent rate, we estimate simple linear regression models, where the dependent variable is the *consent* (0 if no-reply or if no-consent, 1 if consents), and the independent variable of interest is the assignment to the treated and control groups.

Table 1 shows the results of these linear probability models.<sup>5</sup> Education providers assigned to the treatment are cca. 8.7% points less likely to consent than those in the baseline control group (see the first column in Table 1). The difference between the treatment and the social-status-focused groups is smaller and only marginally significant but still sizeable at around –7% points. Considering that the consent rate of the treated group is around 6.2%, these effect sizes are large: education providers in the control groups were over twice more likely to consent to our request than providers in the treatment group.

When sending out the e-mails, we have requested feedback on the receipt of the letter. Albeit this was an automated request, the reader must have actively allowed the system to notify us about the receipt. The reading rates were as follows: (1) treatment group: 29.2%; (2) social status control group: 36.45%; (3) baseline control group: 37.19%. There is a marginally significant 7%–8% points difference between the treatment and the control groups.

As sending the feedback requires active contribution, this feedback is probably endogenous to our treatment. If an education provider encounters an uncomfortable topic, it may not send a read-receipt on purpose. Therefore, we cannot rule out the possibility that the reading rate is lower in the treatment group because these education providers refused to confirm even that they have received our letter.

Nevertheless, using this variable, we can still estimate a conditional average treatment effect (CATE) to check whether our treatment had any effect even after the recipient has read the letter (see columns 3 and 4 in Table 1). Around 20% of those who read the e-mail and were assigned to the treatment are willing to consent to our request. This rate is much higher in both of the control groups: the social status control group is around 15% points, while the baseline control group is around 19% points more likely to cooperate in future research.<sup>6</sup>

### 4. Conclusion and discussion

In this paper, we detected a significant negative effect of mentioning gender as a research topic on conducting academic research in Hungary. Education providers are significantly less likely to cooperate in future research if it is gender-related compared to when it is not. The difference also exists, albeit on

<sup>3</sup> Of the total 341 education providers 39 have replied positively and 4 negatively to our request (one in the treatment group, one in the social status control group and two in the baseline control group). The remaining 298 did not reply. As our hypothesis is about cooperation, we will treat the 4 negative replies as well as the 298 non-replies as non-cooperation. This choice does not affect the conclusion of our study.

<sup>4</sup> Fischer's exact tests 1-sided (2-sided) p-values: gender vs. baseline 0.025 (0.035); gender vs. social status 0.065 (0.108); social status vs. baseline 0.423 (0.849).

<sup>5</sup> Marginal effects at means from probit models offer the same results, see online appendix Table C.1.

<sup>6</sup> Results do not change even if we add covariates to our model. See online appendix Table C.2.

**Table 1**

Linear probability models on the effect of treatment on consent to research.

	(1) ATE 1 (H1)	(2) ATE 2 (H2)	(3) CATE 1 (H1 – restricted sample)	(4) CATE 2 (H2 – restricted sample)
Gender (treatment)	−0.0868** (0.0296)	−0.0689* (0.0863)	−0.188* (0.0712)	−0.147 (0.1684)
Social status	−0.0179 (0.6992)		−0.0410 (0.7016)	
Baseline control		0.0179 (0.6992)		0.0410 (0.7016)
Constant	0.149*** (4.32e−07)	0.131*** (2.61e−05)	0.400*** (0)	0.359*** (0)
Observations	341	341	117	117

Romano-Wolf stepdown procedure (Romano and Wolf, 2016) was used to estimate the p-values in parentheses using the *rwolf* Stata® package (Clarke et al., 2019) with 100,000 bootstrap replications.

\*p < 0.1.

\*\*p < 0.05.

\*\*\*p < 0.01.

a smaller scale and on a marginally significant level, between the consent rates of the treated and the social-status-focused groups indicating that the aversion is more against gender and not against social inequalities in general.

As we pointed out, ‘gender’ became politicized before our experiment begun. Although it is clear that gender-related topics are avoided by education providers, making it harder to do academic research, the link between the tone of governmental communication and this prejudice against gender-related research is not necessarily clear. It requires further research to find the exact channels of the treatment effect.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### Appendices: The letter sent out to the education providers; covariate balance; additional ATE and CATE models

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.econlet.2020.109022>.

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